

REMARKS

Status of the Claims

Upon entry of the amendment above, claims 1-35 will be pending, claims 1, 12, 24, and 27 being independent.

Claims 1-9, 12-20, and 23-35 are directed to the elected invention. Claims 10, 11, 21, and 22 are directed to non-elected inventions.

Summary of the Office Action

Claims 1-4, 12-15, and 23-28 are rejected under 35 USC §102(b) as being anticipated by FR '322, as set forth on pages 2-4 of the Office action.

Claims 12 and 16 are rejected under 35 USC §102(b) as being anticipated by FR '832, as set forth in Section 4 on page 4 of the Office action.

Claims 5 and 16 are rejected under 35 USC §103(a) as being unpatentable over FR '332 in view of FR '832, as set forth in Section 6 on page 5 of the Office action.

Claims 6-8 and 17-19 are rejected under 35 USC §103(a) as being unpatentable over FR '332, as set forth in Section 7, beginning on page 5 of the Office action.

Claims 17-19 are additionally rejected under 35 USC §103(a) as being unpatentable over FR '832, as set forth in Section 8, beginning on page 6 of the Office action.

Claims 9 and 20 are indicated to contain allowable subject matter, but are objected to for depending from rejected parent claims.

Response to the Office Action

A. Summary of the Amendment

In the amendment above, paragraphs 0015, 0030, and 0047 have been amended to change the word "limit" to "end" for describing elements 4 and 5 (*i.e.*, the *ends* of the gliding board of the invention).

In addition, paragraph 0029 has been amended to provide a basis in the specification for the subject matter of new claim 35 (*i.e.*, "between front and rear contact lines of the gliding apparatus said gliding surface has a width of more than half a width of said support surface"), which subject matter finds support at least from original Figs. 4 and 5.

Paragraph 0047 has been amended to provide a basis in the specification for the subject matter of new claims 31-34 (*i.e.*, referencing a central transverse vertical plane and a central longitudinal vertical plane).

All of the independent claims, *viz.*, claims 1, 12, 24, and 27, have been amended to specify that on both ends of the gliding apparatus the support surface *and* the gliding surface include a shovel. This subject matter is not believed to be taught or suggested by either FR '322 or FR '832, as explained below.

No prohibited new matter is believed to have been added.

B. Withdrawal of Rejections Based Upon FR '322

Applicant requests that the rejections based upon FR '322, taken alone under 35 USC §102 or §103, or in combination with FR '832, be reconsidered and withdrawn at least for the following reasons.

As just mentioned above, all of the independent claims, *viz.*, claims 1, 12, 24, and 27, have been amended to specify that the support surface forms a shovel at each of the two ends of the gliding apparatus and that the narrower gliding surface also forms a shovel at each of the two ends of the gliding apparatus.

This construction provides a particular performance characteristic for the invention which is not believed to be taught or suggested by FR '322.

Before comparing the claimed invention to FR '322, Applicant will provide explanatory comments relating to the meaning of the term "shovel."

First, paragraphs 0020 and 0025 of Applicant's specification provide a description, respectively, of the shovels of the support surface and the shovels of the gliding surface. In the illustrated exemplary embodiment of the invention shown in Fig. 3, for example, the support surface shovels are identified with reference numerals 20 and 24, and the gliding surface shovels are identified with reference numerals 36 and 38.

Attached hereto are certain pages from international standard ISO 6289, which is the standard published by the International Organization for Standardization for skis and snowboards, which provides descriptions for various terms relating to alpine skis, cross-country skis, and snowboards. The pages are taken from the latest version of ISO 6289, *i.e.*, the second edition, published in 2003 as ISO 6289:2003, replacing ISO 6289:1985. The pages are bilingual, *i.e.*, French-English. Included are the following pages: Title page; Contents; Foreword; and pages 1-7.

On page 5 of ISO 6289:2003, a description of "ski shovel" is given as "forward section of the ski, which is turned up in order to ride easily over obstacles. See Fig. 2."

Fig. 2 of ISO 6289:2003, referenced in the description of "ski shovel" and appearing at the top of page 7, shows the ski shovel 2 as extending from the forward contact line 6 of the ski to the tip of the ski. Of course, inherent in the description of "ski shovel" is that the shovel enables the ski (or snowboard) to move forwardly and remain over the snow surface (or other terrain).

With Applicant's claimed gliding apparatus, which encompasses snowboards, shovels are provided both front and rear so that the rider can move forwardly with either end of the apparatus.

On page 6 of ISO 6289:2003, descriptions are provided for forward and rear "contact line," which is referenced in the definition of "ski shovel." As is readily apparent from Fig. 2

on page 7 of ISO 6289:2003, a "contact line" is the forwardmost or rearwardmost contact line between the bottom surface of the ski/snowboard and a flat surface against which the ski/snowboard body is pressed.

With the foregoing as background, Applicant respectfully submits that the invention of the independent claims, particularly as amended above, is not taught or suggested by FR '322.

Each of the independent claims describes *four* shovels. With specific reference to claim 1, then, at each end of the claimed gliding apparatus, Applicant calls for a gliding surface shovel and a wider support surface shovel. Thus, consistent with the description provided by ISO 6289:2003, and consistent with Applicant's original disclosure, at each end of the gliding apparatus of the invention of claim 1, for example, both the narrower gliding surface and the wider support surface extend as a shovel.

By contrast, Figs. 3 and 4 of FR '322 demonstrate that gliding board disclosed has only a *single shovel* 12 at the front end. Shovel 12 is mentioned by FR '322 on page 3, lines 9-10. The shovel 12 of FR '322 is common to both the support surface and to the gliding surface, *i.e.*, the shovel 12 has the same width top and bottom. The narrower gliding strip 1 is seen to end or merge with the remainder of the board before any structure that could be considered a shovel, *i.e.*, understanding the meaning of the term "shovel" in terms of its aforementioned meaning known to those skilled in the art from ISO 6289:2003 and in terms of that which is provided by Applicant's specification.

That is, Figs. 3 and 4 of FR '322 show the gliding strip 1 to end, or merge with the remainder of the board, before the single shovel 12, *i.e.*, the single-width shovel 12.

In addition, at the rear of the gliding board of FR '322 is a fish-tail, or boat-tail, structure, which includes a prominent slit that is shown in Fig. 3 to extend all the way to the rear contact line of the board. For this reason, it would appear that the gliding strip 1 ends at

least at the rear contact line and, therefore, does not provide any structure that would enable one to conclude that more than a single shovel is formed at the rear of the board of FR '322. Further, because of the fish-tail construction at the rear, Applicant submits that FR '322 does not even provide a shovel, according to conventional understanding, at the rear. That is, if a rider were to move rearwardly on the board of FR '322, the split 13 would inhibit, rather than facilitate, riding easily over obstacles (see ISO 6289:2003, page 5).

Still further, in new claims 31-34, Applicant provides a more emphatic distinction vis-à-vis the fish-tail structure of FR '322. That is, in those claims (which are similar, per se, but which depend from respective ones of the independent claims) Applicant calls for the front and rear "support surface shovels" to comprise a "continuous surface from a first lateral edge, through a central longitudinal vertical plane of the apparatus, to a second lateral edge." By contrast, in FR '322, the upper surface at the rear of the gliding board is split, rather than continuous. In addition, it is questionable that the upper surface at the rear (or front) of the gliding board of FR '322 can be characterized as a "support" surface, based upon the description.

Further regarding new claims, in new claims 29 and 30 (which depend, respectively, from independent claims 1 and 12), Applicant describes a "perimeter" of the gliding surface, viz., "said gliding surface comprises a first longitudinally extending lateral edge, a second longitudinally extending lateral edge, and first and second ends connecting said first and second longitudinally extending lateral edges." Applicant's exemplary embodiment shown in Figs. 2 and 5 illustrate that the gliding surface includes distinct ends 25, 27. Therefore, taking claim 29 and parent claim 1 together (and claim 30 and parent claim 12 together), the gliding apparatus of the invention includes not only separate shovels for the gliding and support surfaces, the narrower gliding surface itself includes distinct ends, front and rear.

C. Withdrawal of Rejections Based Upon FR '832

Applicant requests that the rejections based upon FR '832, under 35 USC §102 and §103, be reconsidered and withdrawn at least for the following reasons.

The structure of the gliding board of FR '832 is shown to be, at least in the cross section of Fig. 3, somewhat similar to that of FR '322, although the board of FR '832 includes a rather pronounced front end section 4, which section extends forwardly of a support platform. As recognized by the omission of dependent claim 23 from any rejection based primarily upon FR '832, the support and gliding surfaces of the board of FR '832 do not have the same length or even substantially the same length.

Further, FR '832 fails to anticipate or render obvious Applicant's claimed invention for much the same reasons why FR '322 fails to do so.

That is, to summarize the discussion from above, all of the independent claims specify that the support surface of the claimed gliding apparatus forms a shovel at each of the two ends and that the narrower gliding surface also forms a shovel at each of the two ends.

FR '832 fails to teach or suggest this construction and there is no apparent reason why one skilled in the art would have been directed or motivated to modify the board of FR '832 in a way that would have resulted in Applicant's invention.

SUMMARY AND CONCLUSION

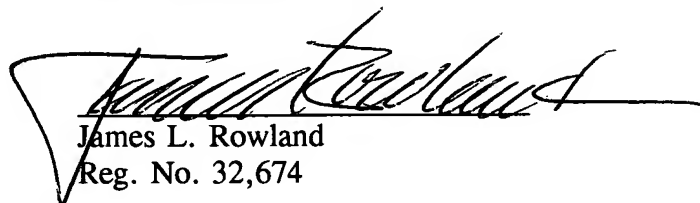
The grounds of rejection advanced in the Office action have been addressed and are believed to be overcome. Reconsideration and allowance are respectfully requested in view of the amendment and remarks above.

A check is enclosed for payment of a claim fee. No additional fee is believed to be due at this time. However, the Commissioner is authorized to charge any fee required for acceptance of this reply as timely and complete to Deposit Account No. 19-0089.

Further, although no extension of time is believed to be necessary at this time, if it were to be found that an extension of time were necessary to render this reply timely and/or complete, Applicant requests an extension of time under 37 CFR §1.136(a) in the necessary increment(s) of month(s) to render this reply timely and/or complete and the Commissioner is authorized to charge any necessary extension of time fee under 37 CFR §1.17 to Deposit Account No. 19-0089.

Any comments or questions concerning this application can be directed to the undersigned at the telephone or fax number given below.

Respectfully submitted,
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Attachment: Excerpts from ISO 6289:2003

Norme

NF ISO 6289

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Skis

Vocabulaire

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6289 was prepared by Technical Committee ISO/TC 83, *Sports and recreational equipment*, Subcommittee SC 4, *Skis and snowboards*.

This second edition cancels and replaces the first edition (ISO 6289:1985), which has been technically revised.

Skis — Vocabulary

1 Scope

This International Standard defines terms for the specification of important characteristics of alpine, cross-country skis (XC-skis) and snowboards.

2 Terms and definitions

2.1

ski

sliding skid of narrow width in relation to its length, with the front end turned up in a radius to ride over obstacles, used as a sporting and recreational device for sliding on snow, ice and artificial snow, but also serving other purposes

NOTE 1 The term "ski" does not include use under other conditions, for example sliding on plastic mats, unless this is clearly stated by the manufacturer. It is to be understood that, in this International Standard, the term "ski" is used to refer to the different types of snow skis.

NOTE 2 In the English language, the term "snow ski" is sometimes used in alpine and Nordic skiing. A similar term does not exist in German and French.

2.2

alpine ski

snow ski used for sliding down slopes as a result of gravitational force

NOTE The control of direction and speed is accomplished through combined motion in the longitudinal and lateral directions of the ski. In order to transmit the steering forces, the edges of the running surface are generally equipped with hard and wear-resistant materials.

2.2.1

mountaineering ski

alpine ski designed for the ascent and descent of mountains

NOTE Usually with so-called touring bindings which allow heel lift in the ascent phase. (Normally, the ski is light, short and wide.)

Skis — Vocabulaire

1 Domaine d'application

La présente Norme internationale définit des termes relatifs à la spécification des caractéristiques importantes des skis alpins, des skis de fond (skis XC) et des surfs des neiges.

2 Termes et définitions

2.1

skis

patins utilisés pour glisser, de largeur relativement faible par rapport à la longueur, dont l'extrémité avant est recourbée vers le haut pour faciliter le franchissement des obstacles, utilisés pour la pratique du sport et pour les loisirs, pour glisser sur la neige, la glace ou la neige artificielle, mais également à d'autres buts

NOTE 1 Le terme «ski» ne couvre pas d'autres utilisations dans d'autres conditions comme par exemple la descente de tapis en plastique, à moins que cela ne soit clairement établi par le fabricant. Il est entendu que, dans la présente Norme internationale, le terme «ski» concerne toutes les formes de ski de neige.

NOTE 2 En anglais, «ski de neige» est quelquefois utilisé pour désigner le ski alpin et le ski nordique. Il n'existe de terme similaire ni en allemand ni en français.

2.2

skis alpins

skis utilisés pour descendre des pentes sous l'action de la pesanteur

NOTE Le skieur se dirige et règle sa vitesse en combinant les déplacements longitudinaux et transversaux. Les bords de la face de glissement sont généralement revêtus de matériaux durs et résistants à l'usure afin de bien transmettre les efforts de direction.

2.2.1

ski de montagne

ski alpin conçu pour les montées et les descentes en montagne

NOTE Il est habituellement utilisé avec des fixations qui permettent de lever le talon pendant la montée. (Normalement ce ski est léger, court et large.)

2.2.2

snowfield slider

ski used for sliding down snowfields

NOTE Generally, its length does not exceed twice the length of the boot.

2.2.3

downhill ski

alpine ski intended for downhill competitions in which high speeds are attained

2.2.4

slalom ski

alpine ski intended for slalom competitions according to the FIS slalom racing rules

2.2.5

giant-slalom ski

alpine ski intended for giant slalom competitions according to the FIS giant-slalom racing rules

2.2.6

freestyle ski

alpine ski intended to be used in freestyle competitions according to the regulations of freestyle associations

2.2.7

ballet ski

freestyle ski intended for ballet and acrobatic ballet type manoeuvres

NOTE Easy turning and skidding capabilities are key characteristics.

2.2.8

adult's ski

ski intended to be used by adult persons who weigh more than 45 kg

2.2.9

junior ski

ski intended to be used by persons who weigh 30 kg to 45 kg

2.2.10

children's ski

ski intended to be used by persons who weigh less than 30 kg

2.3

cross-country ski

XC-ski

snow ski designed for skiing over flat and hilly terrain

2.2.2

patinette pour glacier

ski utilisé pour les descentes de glacier

NOTE Sa longueur n'excède pas en général deux fois la longueur de la chaussure.

2.2.3

ski de descente

ski alpin utilisé pour les compétitions de descente à grande vitesse

2.2.4

ski de slalom

ski alpin utilisé pour les compétitions de slalom suivant les règles de la FIS

2.2.5

ski de slalom géant

ski alpin utilisé pour les compétitions de slalom géant suivant les règles de la FIS

2.2.6

ski de «freestyle»

ski alpin utilisé pour les compétitions de «freestyle», suivant les règles des associations de «freestyle»

2.2.7

ski de ballet

ski de «freestyle» utilisé pour les figures de ballet et les figures acrobatiques de ballet

NOTE Son aptitude à tourner et à dérapier sont ses caractéristiques spécifiques.

2.2.8

ski pour adulte

ski utilisé par des adultes dont le poids est supérieur à 45 kg

2.2.9

ski pour adolescent

ski utilisé par des personnes dont le poids est compris entre 30 kg et 45 kg

2.2.10

ski pour enfant

ski utilisé par des personnes dont le poids est inférieur à 30 kg

2.3

ski de fond

ski XC

ski conçu pour la pratique sur terrain plat ou vallonné

2.3.1

cross-country racing ski

cross-country ski designed for use in cross-country competitions

NOTE Design emphasis is placed on light weight in addition to gliding ease in well-prepared tracks.

2.3.2

light touring ski

cross-country ski designed for skiing in tracks and outside tracks under relatively good snow conditions

2.3.3

touring ski

cross-country ski designed for skiing in tracks as well as outside tracks

2.3.4

mountain ski

cross-country ski designed for skiing in mountainous terrain

2.3.5

wilderness ski

bush walker

cross-country ski designed for skiing outside tracks under all snow conditions

NOTE A very short (usually about 150 cm) and broad ski.

2.3.6

cross-country adult's ski

ski intended to be used by adult persons who weigh more than 45 kg

2.3.7

cross-country junior ski

ski, usually of the same construction as an adult's ski but shorter, intended for juniors and adults with relatively short height and a weight of 30 kg to 45 kg

2.3.8

cross-country children's ski

ski, usually of a special construction, intended to be used by children who walk rather than glide on the snow and who weigh less than 30 kg

2.3.1

ski de fond de compétition

ski de fond conçu pour l'utilisation en compétition

NOTE L'accent est mis sur la légèreté du ski, en sus de la facilité de glissement sur pistes bien préparées.

2.3.2

ski «light touring»

ski de fond conçu pour skier sur pistes et hors piste quand les conditions de neige sont relativement bonnes

NOTE Il n'existe pas d'expression correspondante consacrée en français.

2.3.3

ski de fond «touring»

ski de fond conçu pour skier sur pistes aussi bien que hors piste

NOTE Il n'existe pas d'expression correspondante consacrée en français.

2.3.4

ski de randonnée nordique

ski de fond conçu pour skier en moyenne montagne

2.3.5

.....

NOTE Il n'existe pas d'expression correspondante consacrée en français.

2.3.6

ski de fond adulte

ski destiné aux personnes adultes pesant plus de 45 kg

2.3.7

ski de fond junior

ski, généralement de même structure que le ski adulte mais plus court, destiné aux juniors et adultes relativement petits et pesant de 30 kg à 45 kg

2.3.8

ski de fond enfant

ski, généralement de structure spéciale, destiné à être utilisé par des enfants qui marchent plutôt qu'ils ne glissent sur la neige et qui pèsent moins de 30 kg

2.4

snowboard

single-plane device ridden with a sideways stance with the feet angled to the longitudinal axis of the device

2.4.1

alpine snowboard

snowboard designed for the practice of alpine type of riding, especially competition oriented

2.4.2

free-ride snowboard

snowboard for the purpose of riding the mountains on natural terrain with different snow conditions

2.4.3

free-style snowboard

snowboard for the purpose of doing tricks and manoeuvres adopted directly from skateboarding

2.4.4

goofy

snowboard riding with the right foot forward

2.4.5

regular

snowboard riding with the left foot forward

2.5

monoski

single-plane sliding ski ridden with the feet parallel to the longitudinal axis of the ski

2.6

Telemark skiing

type of alpine skiing technique where the heel of the boot is not fixed during downhill skiing

3 Terms and definitions relating to design features

3.1 Terms and definitions relating to functional ski elements

3.1.1

bottom surface **running surface**

underside of the ski which interfaces the snow when skiing

See Figure 1.

2.4

surf des neiges

élément plan (unique) sur lequel le skieur se tient de profil, les pieds formant un angle par rapport à l'axe longitudinal de l'élément

2.4.1

surf alpin

surf des neiges conçu pour la pratique des descentes à grande vitesse, en compétition notamment

2.4.2

surf des neiges pour pratique libre

surf des neiges utilisé en montagne, sur terrain non damé, avec différentes qualités de neige

2.4.3

surf des neiges acrobatique

surf des neiges utilisé pour faire des figures, comme en planche à roulettes

2.4.4

spécial

«goofy»

pratique de surf des neiges dans laquelle le skieur se tient avec le pied droit en avant

2.4.5

normal

«regular»

pratique de surf des neiges dans laquelle le skieur se tient avec le pied gauche en avant

2.5

monoski

ski de descente plan (unique) sur lequel les pieds du skieur sont parallèles à l'axe longitudinal du ski

2.6

ski télémark

technique de ski alpin où le talon de la chaussure n'est pas fixe pendant la descente

3 Termes et définitions relatifs aux caractéristiques de construction

3.1 Termes et définitions relatifs aux éléments du ski

3.1.1

face inférieure

côté du ski qui est en contact avec la neige

Voir Figure 1.

**3.1.2
top surface**

side of the ski opposite to the bottom surface

See Figure 1.

**3.1.3
side surface**

surface which borders the sides of the ski

See Figure 1.

**3.1.4
bottom groove**

concave recess running longitudinally along the bottom surface of the ski

See Figure 1.

**3.1.5
bottom-surface edge**

intersection of bottom surface and side surface

**3.1.2
face supérieure**

côté du ski opposé à la face inférieure

Voir Figure 1.

**3.1.3
face latérale**

côté du ski

Voir Figure 1.

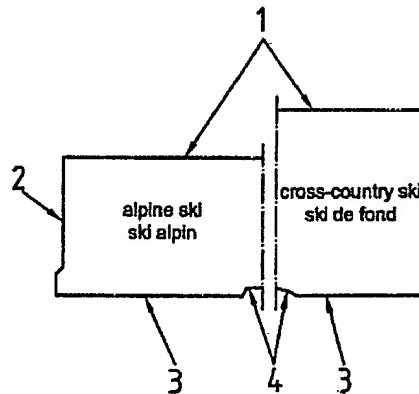
**3.1.4
rainure de la semelle**

rainure longitudinale pratiquée dans la semelle du ski

Voir Figure 1.

**3.1.5
arête inférieure**

intersection de la face inférieure et de la face latérale



Key

- 1 top surface
- 2 side surface
- 3 bottom surface
- 4 bottom groove

Légende

- 1 face supérieure
- 2 face latérale
- 3 face inférieure
- 4 rainure de la semelle

Figure 1

**3.1.6
ski tip**

extreme forward point of the ski

**3.1.7
ski tail**

extreme rear-edge point of the ski

**3.1.8
ski shovel**

forward section of the ski, which is turned up in order to ride easily over obstacles

See Figure 2.

**3.1.6
pointe du ski**

point avant extrême du ski

**3.1.7
talon du ski**

extrémité arrière du ski

**3.1.8
spatule du ski**

partie avant du ski recourbée vers le haut pour surmonter aisément les obstacles

Voir Figure 2.

3.1.9

forward contact line

forwardmost contact line between the bottom surface of the ski and a flat surface against which the ski body is pressed

See Figure 2.

3.1.10

rear contact line

rearmost contact line between the bottom surface of the ski and a flat surface against which the ski body is pressed

See Figure 2.

3.1.11

body of ski

part of the ski between the forward contact line and the rear contact line

See Figure 2.

3.1.12

tail turn-up

turned-up portion of the ski rearward of the rear contact line

See Figure 2.

3.1.13

forebody of ski

front half of the ski body towards the shovel

See Figure 2.

3.1.14

afterbody of ski

rear half of the ski body towards the tail turn-up

See Figure 2.

3.1.15

neutral plane

plane internal to the ski where no bending stresses occur when the ski is bent perpendicular to its bottom surface

3.1.9

ligne de contact avant

limite avant de la zone de contact de la face inférieure du ski sur une surface plane, le ski étant appliqué sur cette surface

Voir Figure 2.

3.1.10

ligne de contact arrière

limite arrière de la zone de contact de la face inférieure du ski sur une surface plane, le ski étant appliqué sur cette surface

Voir Figure 2.

3.1.11

corps du ski

partie du ski comprise entre la ligne de contact avant et la ligne de contact arrière

Voir Figure 2.

3.1.12

relevé de talon

partie arrière relevée du ski à partir de la ligne de contact arrière

Voir Figure 2.

3.1.13

avant du ski

moitié avant du corps du ski

Voir Figure 2.

3.1.14

arrière du ski

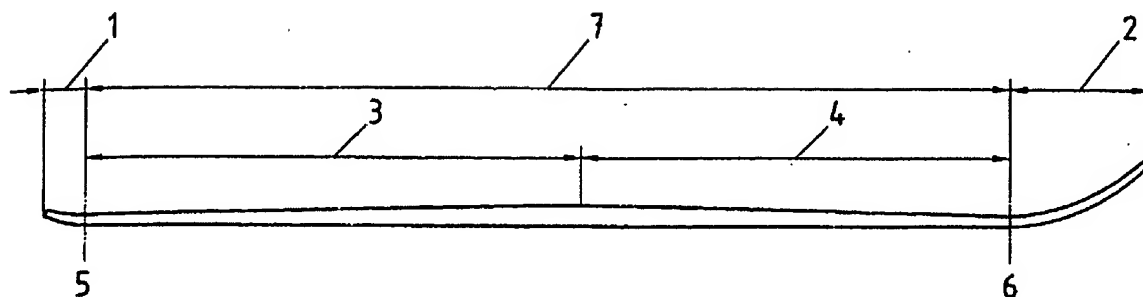
moitié arrière du corps du ski

Voir Figure 2.

3.1.15

fibres neutres

ligne définissant le niveau, à l'intérieur du ski, où les contraintes de flexion sont nulles quand le ski est fléchi perpendiculairement à sa face inférieure

**Key**

- 1 tail turn-up
- 2 ski shovel
- 3 afterbody of ski
- 4 forebody of ski
- 5 rear contact line
- 6 forward contact line
- 7 body of ski

Légende

- 1 relevé de talon
- 2 spatule du ski
- 3 arrière du ski
- 4 avant du ski
- 5 ligne de contact arrière
- 6 ligne de contact avant
- 7 corps du ski

Figure 2

3.2 Terms relating to types of construction

Modern skis generally consist of composite structures. A composite structure, in the technical sense, is a type of construction in which different materials are combined in a single structural element such that every material performs optimally to an applied stress. Materials with high strength and stiffness are incorporated mainly in the external zone of the ski cross-section in order to sustain the bending and torsional stresses occurring in the ski. These structural members are called the load-carrying layers, because of their contribution to important properties of the ski, such as breaking strength and stiffness. A combination of different materials in the load-carrying layers is possible.

A ski may be classified according to the construction employed and the materials used in the load-carrying members of the ski. For an exact specification of constructional parameters, it is recommended that the ski elements and the materials employed be explicit.

EXAMPLE

- load-carrying layers: glass-fibre-reinforced plastic
- core: ash wood
- steel edge: cracked edge, hardness 45 HRC
- top edge: aluminium

3.2 Termes et définitions relatifs aux types de construction

Les skis d'aujourd'hui ont généralement une structure composite. Une structure composite, au sens technique, est un type de construction où sont combinés différents matériaux simples, de manière que chacun d'eux réponde de façon optimale à l'application d'une contrainte. Les matériaux ayant une grande résistance et une grande raideur sont essentiellement utilisés dans les zones externes de la section du ski, afin de résister aux contraintes de flexion et de torsion apparaissant dans le ski. Ces éléments de structure sont appelés lames de résistance ou renfort, car ils contribuent aux propriétés importantes du ski, telles que résistance à la rupture et raideur. Il est possible de combiner différents matériaux pour la réalisation des lames de résistance.

Un ski peut être classé selon le type de construction et les matériaux utilisés dans les lames de résistance. Pour une spécification exacte des paramètres de construction, il est recommandé d'indiquer les éléments et les matériaux employés.

EXAMPLE

- lames de résistance: stratifié de fibre de verre
- noyau: frêne
- carre acier: carre élastique, dureté 45 HRC
- carre supérieure: aluminium

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